

POTENTIAL FEDERAL RESERVE ACTIONS TO SUPPORT INTERBANK SETTLEMENT OF FASTER PAYMENTS

Federal Reserve Notice

Submission by Ripple

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Background

The digital era has fundamentally changed the nature of everyday interactions and commerce. A gap has emerged between the capabilities of traditional payment methods and the payment capabilities expected in the digital era – fast, convenient, accessible. Faster payments address this gap by allowing payments to be sent and received immediately, and at any time. The Federal Reserve and the payment industry have been working together to determine the best path forward, such that the benefits of faster payments can be enjoyed broadly by the public.

Key Consideration: A robust retail payment system for the future requires a payment infrastructure that can support and sustain continued innovation in safe, broadly accessible faster payment solutions.

In 2015, the Federal Reserve issued Strategies for Improving the U.S. Payment System, a multi-faceted plan to enhance the speed, safety and efficiency of the U.S. payment system. In 2017, the industry asked the Federal Reserve to develop a 24x7x365 settlement service for faster payments. The industry's request reflects the Federal Reserve's foundational role in settlement of interbank obligations. The resulting Federal Register Notice presents potential actions that could support a safe, modern payment infrastructure for interbank settlement of faster payments.

Federal Register Notice

Objective: Promotion of ubiquitous, safe, and efficient faster payments in the United States through facilitation of real-time interbank settlement.

Potential Federal Reserve actions:

1. Develop a 24x7x365 RTGS Settlement Service for faster payments
2. Develop a Liquidity Management Tool to support RTGS services

Key Question in the Federal Register Notice: Is RTGS the appropriate strategic foundation for interbank settlement of faster payments in the United States?

Potential RTGS Service

The potential scope of such a service could be:

- Real-time, payment-by-payment interbank messaging and settlement in Federal Reserve accounts
- 24x7x365: Operating around the clock, every day (weekends and holidays)
- Full payment information (clearing and settlement) carried in payment message
- Available to depository institutions eligible to hold a Federal Reserve account
- Agents could submit payments on behalf of a depository institution
- Access through Reserve Bank channels (FedLine)
- End-of-day balances recorded for each day of the week

Potential Liquidity Management Tool

This would offer a way to move money outside standard business hours between a master account and another Federal Reserve account used to support 24x7x365 real-time settlement services for faster payments.

Potential functionality could include:

- Bank-initiated transfers
- Agent-initiated transfers
- Automatic transfers/standing instructions

Ripple Submission to Key Questions in the Federal Register Notice

Is RTGS the appropriate strategic foundation for interbank settlement of faster payments in the United States?

Response:

There are diverse views amongst the industry if an RTGS or other model, such as deferred net settlement, would best meet market needs.

Regardless of which model is utilized and whom operates the systems – be it the Federal Reserve or the private sector – Ripple feels strongly that such systems be designed to leverage emerging technology to future-proof the investments being made.

Globally, payment infrastructures are exploring (1) seamless interoperability via open-source protocols and (2) the potential for a variety of digital asset models to improve efficiency in liquidity management and settlement.

For the U.S. to remain internationally competitive and drive payment innovation, it is important that new systems are exploring and adopting the latest technology.

Real-time interoperability between domestic and cross-border systems is a critical capability to enable ubiquity and efficient reach. A variety of central banks and market infrastructures are exploring this capability using open-source protocols and distributed ledger technology. There is great potential in these technologies, especially in enabling interoperability and real-time cross-border transactions. The Interledger Protocol is an open-source solution designed to synchronize transactions across ledgers, enabling interoperability across domestic or cross-border systems. It is important that new U.S. infrastructure be designed to leverage these tools.

Further, new systems should explore leveraging digital assets as a liquidity or settlement tool, especially for cross-border transactions. Ripple sees great potential in leveraging digital assets to enable more efficient reach and real-time access to liquidity for cross-border payments. New systems should consider these technologies and benefits.

By leveraging new technologies, the U.S. can position itself to best meet not only the needs of the market today, but also the quickly changing expectations for payments in the future. We see a future where expectations for domestic and cross-border payments converge, with customers expecting all payments to be immediate, low-cost, and with full transparency into status and fees. We call this the Internet of Value, a vision where value moves as seamlessly as data does over the Internet. To meet this expectation, payment systems and financial institutions will have to leverage new and emerging technologies.

While Ripple is not taking a view if the Federal Reserve should operate a new system, we do urge the Federal Reserve to publicly disclose its expected future role in payments in the near future to give the market greater certainty in planning its strategic investments. The market will hold off on making investments and decisions until it has greater certainty of the Federal Reserve's role in payments.

Questions & Responses about Potential 24x7x365 RTGS Settlement Service

1. Will there be sufficient demand for faster payments to support the development of this service?

Yes, we see sufficient and growing demand for faster payment solutions both in the domestic and cross-border setting.

2. What is the ideal time to market for this service?

For domestic payments, a simple 'credit push' service that offered ubiquity (i.e. acceptance of the credit by all financial institutions and non-bank financial institutions) could be brought to market in 12-18 months as the minimum, mandatory service. Additional services, e.g. 'request to pay' could follow. Individual banks could of course build innovative new services on these new payment rails.

Cross-border solutions like RippleNet are live and growing.

3. What adjustments would the industry and its customers need to make to operate in a 24x7x365 environment?

The single biggest impact would be on the financial institutions that currently operate batch transaction processing of core ledger systems only on business days. A real-time, 24x7x365 'stand-in' capability or migration to a real-time core ledger would be options to consider.

The industry should continue to advance fraud detection and mitigation capabilities, that operate in real-time, to maintain the integrity and confidence in our payment systems while minimizing risks and losses.

SME and corporate accounting systems, that operate via batching of transactions today, would need to feed in single transactions and respond similarly to get significant benefits from such a service. Retail customers, already used to apps on mobile phones for a variety of online activities, would likely adapt the fastest to the new real-time and always available service.

4. How would the demand for, and the cost of using this service be impacted by design features such as seven-day accounting, use of dedicated settlement accounts, etc.? *These are detailed considerations that may impact stakeholder segments differently.*
5. Are auxiliary services, such as a payment directory or fraud prevention services, needed for this service?

A shared aliasing service to simplify addressing of payments and masking of account information (via the use of new payment ID's, email or mobile phone numbers) could make the service easier to use, especially for retail and SME usage, and has been the practice in other countries. In most cases, a real-time payment capability linked with existing directories would enhance the associated retail, SME, and corporate use cases and drive incremental adoption.

6. How critical is interoperability between RTGS services for faster payments to achieving ubiquity?
Interoperability is critical to ubiquity, adoption and the ultimate success of new payment infrastructures. Enabling interoperability with the delivery of 'atomic transactions', i.e. a debit to the sender's account is accompanied by a credit to the beneficiary's account, even via intermediaries, is essential. While interoperability across domestic RTGS systems is easier to imagine, customers will demand such Faster Payments to be offered even across borders. So 'atomic transactions' across RTGS systems in different countries will offer significant value, to both retail and corporate customers. Such interoperability is possible today, as already demonstrated in cross-border settlements using the open-source Interledger Protocol (see www.interledger.org).

Questions & Responses about Potential Liquidity Management Tool

1. Will there be sufficient demand to support the development of this tool?

We do expect sufficient demand to justify the exploration and development of this tool.

2. Would this tool need to be available 24x7x365, or alternatively, during certain defined hours on weekends and holidays?

While Financial Institutions may have such tools today, they will need to be operable on a 24x7x365 basis, with appropriate controls and safeguards. This will be especially important in the early stages, when participants may not be able to forecast demand with great accuracy.

3. Could this tool be used for purposes other than to support real-time settlement of retail faster payments?

Possibly, but we do not have a comment in this regard.

4. How much would this tool help foster ubiquitous access to safe and efficient faster payments?

Given that the widespread availability of a real-time, 24x7x365 service will spur changes in consumer behavior, it will be challenging to predict liquidity needs in the initial 12-18 months of usage. So this tool will be important to monitor and manage liquidity until forecasting methods are made more sophisticated and dynamic.

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